

Literacies in Workplaces: A Case Study

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What is literacy for? We do our work well! Why do they want to know about our literacy?

These were the questions asked by a 50-years-old woman working in a multi-national corporation that manufactures electronics components, when the workers were informed about an assessment of their literacy practices, promoted by the administration of the factory and to be developed by a university department.

In this text we will describe some aspects of the literacy research project and of the following intervention programme in workplaces that was carried out in Braga, Portugal, from November 2002 to June 2004, in that high-tech factory (from now on, the Factory).

The setting is a highly specialized and technologically advanced company, established in Braga for approximately fifteen years. It is also a highly complex and hierarchical organization, involving several departments apart from the assembly line: commercial, human resources, and financial departments, for example. Together with the traditional Fordist model – each individual on the assembly line doing his/her assigned work – new work methods are being implemented, for instance, working in teams (where workers supervise each other) in such terms that the workers “collaboratively and interactively design and redesign their work process with a full knowledge of and overlap with each other’s functions...” (Gee, 2000, p. 186).

In this organization there are around 2000 workers (nowadays called “collaborators”), some of them working there since the Factory was founded. The workers are mainly (married) women, 85.7% of them working in the assembly line; their ages can explain different and low levels of formal education: 24.1% have less than 4 years of schooling or less; 27.8% have 5 or 6 years; 28.7%: have between 7 and 9 years (since the beginning of the 1970s, compulsory education in Portugal increased from four to six, and then to nine years of schooling). In spite of their strong (and traditional) participation in trade unions, the participation of these workers in popular associations (as reported by themselves) is rather weak. These people appeared to be very much involved in professional training in the Factory, a practice that was, by several means, strongly imposed by the administration.

Due to the employment situation of the country, the fears of the workers when they were informed about the literacy survey that was going to take place were quite comprehensible. Actually, questions like those of the above quoted worker were asked by the researchers of the Unit for Adult Education (UfAE) of the University of Minho, when in November, 2002, they were approached by a representative of the Administration of the Factory, soliciting, in her words, “a programme to assess and improve the literacy of the workers”.

The need for this assessment was not very clear and it seemed that there was not a straight answer as the workers demanded. In fact, the point of view of the Administration – “*we think our workers have low literacy levels; we are a technologically advanced factory, so it is difficult to cope with that situation; we would like to know exactly what is going on at this respect*” – was a little bit “contradictory” if we consider that the low educational levels of the workers were very well known by the Human Resources Department and that there weren’t immediate implications of that fact in the manufacturing process: the work was being done according to the norms and there were no news about product damages because of “illiteracy”. To the questions of the workers such as: “*what is there about literacy? Why is it important? What are you going to do with the data you want to collect?*” the answer and argument was the importance for high levels of literacy in a high-tech factory, where there was a continuous need for training the workers for ever new work demands.

To address this issue, the research team shared some theoretical and political perspectives that weren’t coherent with i) a psychological perspective of literacy – with its “notion of discrete individual variable” – (Barton, 1994, p. 25) and, therefore, with autonomous approaches (according to this same author, those “which claim that literacy can be defined separately from the social context”), and their consequences in the *hows*, *whys* and *ways* of

assessment; ii) strong assumptions towards social issues such as unemployment and neo-liberal working conditions.

The UfAE researchers point of view was then: *“before deciding what to do, it is important to know what is going on; the research will concern not only some workers, but everybody in the organisation and the organisation itself.”*

After a long process of negotiation concerning both perspectives of literacy and ways to conduct the process, some conditions were agreed by the Factory and the team:

i) both the Factory administration and representatives of the workers would be involved in the general ‘political’ co-ordination of the process;

ii) data collection would consider the situation: what are the literacy demands?; what opportunities are there for literacy practices?; what are the characteristics of the verbal texts existing in the organisation?;

iii) data would be elicited taking into consideration what people know and do in the specific circumstances in which they act, and, finally,

iv) data to be provided to the Factory administration, as result of the assessment, would be anonymous.

The initial “literacy assessment of the workers” project became, then, a wider one with the following aims: to characterise the Factory as a literacy context, in its material conditions (what are the written texts available and what are their characteristics) and foreseen practices (what are people expected to do with those written texts); to characterise literacy practices and attitudes inside and outside the workplace; to identify patterns of the reading practices among the workers; and to promote meaningful literacy practices and attitudes concerning both the workplace and other contexts.

A survey on reading, writing, and more general cultural practices and attitudes inside and outside the factory was conducted by means of a Questionnaire; and a literacy test build to that particular context was administered to a sample of the workers (from the assembly line to the administrators). At the same time, ethnographic procedures were adopted in order to obtain data concerning the ethos of the context, the relation between the kinds of tasks and the role of literacy, and, as Jo Kleifgen (2005, p. 465) puts it, “the social life of the signs”. Besides systematic observation and collection of documents, formal and extensive interviews provided information about the organisation, the work conditions and the training policy and approaches. For several months, a pilot experiment of an education programme was also held at the Factory.

STRUCTURING THEORETICAL PRINCIPLES OF THE PROJECT

On the one hand, this research and intervention design was an attempt to resist the reductionist conceptions of literacy, and to put in practice some of the principles of the social theory of literacy developed by New Literacy Studies (Barton, 1994; Barton & Hamilton, 1998; Barton, Hamilton & Ivanic, 2000; Gee, 2000). Such framework addresses literacy “as the general cultural ways of utilising written language which people draw upon in their lives” (Barton, Hamilton & Ivanic, 2000, p. 7) and not as “a skill or set of skills” (Barton, 1994, p. 11). Brian Street (1984) views this as an ‘ideological approach’ to literacy – “one that accepts that what is meant by literacy varies from situation to situation and is dependent on ideology” (Barton, 1994, p. 25). The propositions about the nature of literacy from David Barton (1994, pp. 36-52) and David Barton and Mary Hamilton (2000, pp. 7-14) nurtured all the process: literacies are situated in specific times and spaces and are therefore historically located; there is no such thing as a set of legitimate characteristics which apply in all the times and contexts; literacy practices are intentional and they are embedded in wider social objectives and cultural practices; different domains of life (private, public, educational, professional) give origin to different literacies; literacies are means, not an end in themselves.

THE FACTORY: A COMPLEX LITERACY AND EDUCATIONAL CONTEXT

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The data collected by means of observation allowed the characterization of the Factory as a multiple literacies context, serving different ends and people: all sorts of verbal information – work orders documentation, procedures, instructions, graphs, charts – displayed in several formats, surrounded working areas; hanging near the assembly line there were folders with multimodal and highly specialized texts (some with foreign words) about technical procedures. Strongly context dependent and highly coded, not always useful, the majority of this information was produced by certain people in the hierarchy – engineers or members of the Human Resources Department – and, in most cases, to be interpreted by workers in intermediate leading positions, when it was necessary because of some problem in the assembly line.

Besides this “official literacy” that aimed at controlling production and behaviours, external to the workers, and that, in this way, can be seen as a device of authority, serving “surveillance” and eventual “punishment” (Foucault, 1977), there was another literacy in the form of flyers and leaflets of the trade unions and groups of workers, hardly accepted by the Administration.

The Factory also edited a monthly newsletter *O Ponto (The Point)* with news from the Corporation, information about past and incoming events, technical procedures, and so on. The content of this newsletter, and its familiar register, makes it a kind of “space-between” (Bhabha, 1998) where the power relations are weakened and the Factory appears as something also pertaining to the workers.

Besides, the Factory proved to be a formal educational context. And this could be observed, at least, at two levels: the professional level and the second chance education level. At the professional level, training practices can be characterized as i) *non continuous*, in the sense that, to a certain extent, they are dependent of the availability of the workers when the demands of production decrease, ii) developed on a *volunteer basis*, although the Factory assumes very emphatically a policy of professional training, and iii) *oriented towards production skills*, as what is relevant is the acquisition of knowledge about new technologies and new modes of organizing the work. These training practices are mostly conducted in classes, supported by traditional methodologies (of a transmissive kind), and involving the use of textbooks, very school like ones.

During these last years, the Factory developed a protocol with a Secondary School of Braga in order to provide second chance education to those workers who, for one reason or another, dropped out from school. The classes take place in the Factory and they are taught by secondary school teachers, according to the curricula, the methodologies and the assessment practices that are in use in official school. In spite of the small number of workers (usually the younger ones) who attend those courses, it is worth noting that the workers were usually successful in them.

READING OUTSIDE AND INSIDE THE FACTORY

As it was mentioned before, data concerning reading and writing practices outside and inside the Factory were elicited through questionnaires and ethnographic observation: in their everyday life, people report to read various kinds of texts, mainly for pragmatic purposes, but few writing practices were mentioned; most of the people that were interviewed (around 90%) recognise the relevance of reading and writing in everyday life. These practices present both similarities and dissimilarities with what happens inside the Factory. Here, people report frequent and unproblematic practices of reading (worksheets, checklists, tables, digital documents...), in a context where reading appears to be a non-continuous, taskdependent practice, in spite of all the hanging information. Writing clearly emerges as a socially distributed task, in the sense that it is not for everybody, and that it is ascribed to very distinct groups. In the same way as for everyday life, people largely agree (91%) that reading and writing are important for their activities in the Factory.

The reading assessment was conducted by means of a pencil and paper test, structured around two different texts – a short-story and an expository text from the Factory newsletter. The reading tasks concerned retrieving and interpreting information, and metacognitive and

elaborative comprehension processes, taking into account the different goals people may have to read.

Data analysis allowed the emergence of four patterns of reading performance – from very low to high performance. In strong relationship with low school levels, work in the assembly line and gender, it was possible to identify a group of nearly 25% of the population (mainly women) that had severe difficulties in dealing with written texts and reading tasks. These difficulties concerned non-canonical word order, coded uses of language (sigla), less functional reading tasks and interpreting narratives.

NEW DIRECTIONS FOR LITERACY: A PILOT EXPERIMENT IN THE FACTORY

Since the beginning of the project, consideration was given to the possibility of developing an intervention programme aiming at changing the contexts of literacy, at the promotion of literacy practices, and at the development of literacy skills. This intention was reinforced by some of the data that were collected, mainly those concerned with some representations of literacy practices and attitudes shared by the workers, with literacy tasks people were supposed to be involved in, with the characteristics of literacy materials, and with the literacy dimension of the professional training programmes developed in the Factory.

Thus it was decided that, before any attempt of generalization of that intervention programme, a pilot experiment should be developed. The ‘Study Circle’ appeared in this context as an adequate methodology to promote all those objectives at the same time as critical literacy. For fourteen weeks researchers and workers from different departments in the Factory sat together discussing issues around literacy in workplaces, methodologies to promote it, connecting literacy education and professional training, and designing a proposal for literacy development in the Factory.

During this process, but mainly immediately after it ended, conflicts arose between the principles and the proposals that were developed in the ‘study circle’ and those that the administration and the Human Resources Department were used to. In this sense, this pilot experiment showed, besides its potential, the limits of this kind of intervention in a context such as the Factory, by generating contradictions between established practices and new pedagogies.

FINAL REMARKS

The Factory where both the research project and the intervention programme were developed is not, as far as literacy demands and practices are concerned, a homogeneous context. Here, access to literacy is asymmetric and its production and use strengthens the social asymmetries of the Factory. Actually, when one considers the nature of the tasks that the workers are expected to develop and when we look for the features of the work positions in association with reading and writing practices, we can find some strong differences.

On one pole we can find individuals who are deeply and continuously involved in literacy practices, both in reading and writing and whose main tasks are studying and developing by mediation of a lot of written materials. On the other pole, we can meet individuals with scarce involvement in literacy practices, whose main daily tasks are not immediately dependent on written texts, in spite of their dominant presence around them. These are the workers of the assembly line who don’t view those texts as their concern, because that is not “their literacy”. All those manuals of instructions, folders, charts, graphs, posters that say what is being done and what must be done is the “official literacy” of the place “thereby wielding immense power over working lives” (Kleifgen, 2005, p. 453). To this literacy – the privileged one – which, to a certain extent, aims at maintaining the workforce disciplined by a “process of normalization” (Foucault, 1977), the workers responded in their own more dynamic and contextualized ways – by talking among themselves, by using and sharing their practical knowledge acquired during years of practice. In a certain sense, these “endogenous literacy practices” (Kleifgen, 2005, p. 460) may represent to the Administration and the Human Resources Department a form of deviance, not to accept because it escapes their control and

normalization intentions. In this perspective, the need for a literacy assessment can be seen as a form of keeping this control in the name of the “complexity” and “quality” of the produced goods.

In this particular situation, the assessment of the literacy of the people working in the Factory should not avoid taking into consideration the concreteness of the context in which they carry out their activity, the kind of demands they are submitted to, the literacy practices that “position them in relation to the institution and power relations which sustain them” (Barton, Hamilton & Ivanic, 2000, p. 1).

Of course we can understand the *why* of the will of scrutinizing the level of adequacy between what is expected and what is demanded in literacy terms. But in this particular context, we should not forget that the tasks people have to develop in their workplaces can theoretically involve knowledge and abilities that can be behind *or* beyond those that are actually possessed. In the first case, the context may not work as a stimulus for those who have to deal with such situation, in the sense that they are not challenged to push forward their boundaries or even become involved in the process of producing and interpreting the words of that world. In the second case, the results will be obvious negative for individuals, as they can be seen as ‘inadequate’ for the job.

In any of these situations, as was apparent in this setting, the issue of literacy is only remotely a question of person ability. It is not possible in a context like the Factory (and maybe any other context) to circumscribe a set of knowledge and abilities that are needed (as they are always changing because of their dependence on time and space). It is very difficult to state what an individual possesses in terms of literacy as the measure for this will be always contextual dependent and very dynamic in nature. In this sense, life is the measure of literacy practices and attitudes.

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